DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



No

N/A

Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Casey, William **Report No:** WIR-028001 Address: 333 Burma Road **Date Inspected:** 18-Jul-2012

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: American Bridge/Fluor Enterprises, a JV **Location:** Job site

CWI Name: CWI Present: Yes No Jesse Cayabyab

Inspected CWI report: Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:**

> **Delayed / Cancelled:** Yes

34-0006 **Bridge No: Component:** Tower

Summary of Items Observed:

Quality Assurance Inspector (QAI) Rodney Patterson was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

Electroslag Weld Excavations

This QA observed ABF/JV welding personnel Wen Han Yu #6317 performing an exploratory excavation of an Electroslag Weld ESW "B" from face A. The exploratory excavation was performed to compare the AWS decibel rating to the actual indication observed due to the attenuation of sound in the coarse grained welds. The indications that were excavated were discovered by the joint QA/QC inspection team on a previous shift. The joint inspection team utilized the supplemental UT procedure SE-UT-D1.5-CT-108-ESW-R5 for the inspection of electroslag welds; however the use of the pitch-catch ultrasonic testing has not been utilized to date.

The carbon arc gouging process as well as grinding was used to excavate approximately 2mm at a time once near the indications depth. In between excavation passes both QAI and QC inspector Jesse Cayabyab performed Magnetic Particle Testing (MT) and photographed any observed indications found at the achieved depth. The weld ESW "B" was excavated at the following Y locations on this date. The details of the QA/QC findings were recorded on a joint inspection form for ESW weld excavations and are as follows;

ESW "B" Face A from Y=6330~6530 for a longitudinal recordable indication ultrasonically detected at approximately Y=6430 (+8 AWS db rating.)

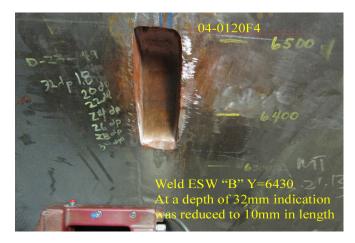
Initial excavation 18mm in depth- No indications observed. At a depth of 26mm a 15mm linear indication was

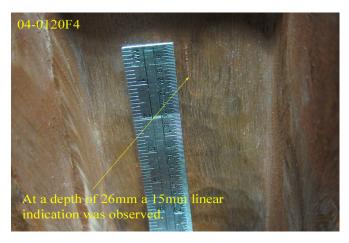
WELDING INSPECTION REPORT

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observed. The depth of the excavation at the end of the QAI's shift was measured to be 32mm with one (1) remaining 15mm linear indication. Further grinding of the indication will be required on a later shift.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.





Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Patterson,Rodney	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer